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[001] GASKET SEAL WITH POSITIONING STOPS FOR A FIXED WINDOW GLUED
~~WHICH IS SOLIDLY CONNECTED TO [[THE]] FLANGES OF AN OPENING AND THE~~
~~PRODUCTION METHOD THEREOF~~

[004] The present invention concerns a perimeter seal surrounding a window installed in the opening of a vehicle body, particularly a windshield, a rear side window, or a back window.

[008] Fixed windows such as for example, windshields, rear side windows or back windows are now installed using conventional methods of adhering them to a recess in the vehicle body which forming a groove in the opening by means of a peripheral bead of adhesive.

[044] Figure 2 is a plan view of the interior surface of a seal with three profile portions according to the invention Figure 2A is a plan view of the interior surface of a seal which surrounds an entire perimeter of a window;

[053] Figure 11 is a transverse cross-section taken along line XI-XI of Figure 6 of a seal according to the present invention in the area of the positioning stop; and Figure 12 is a general schematic perspective of the rear of an automobile having rear and side windows equipped with seals according to the invention.

[057] Obviously, the invention is not limited to a seal for a windshield, but can be used for any other type of fixed window installation, such as, for example, rear side windows 33 or back windows 32 for automobiles.

1-16. (CANCELLED)

17. (CURRENTLY AMENDED) A seal for a fixed window (3) ~~for~~ covering an opening (4), ~~specifically an opening in of~~ an automobile, ~~in the form of the seal comprising~~ a profile (13) comprising a longitudinal groove (23) with a sidewise U-shaped transverse section for attachment to an edge (9) of the window (3) and a masking lip (25) ~~for~~ covering a space (8) between the edge (9) of the window (3) and an adjacent edge (7) of the opening[[,]]:

wherein a longitudinal rib (29) is provided on an interior surface of the seal, the [[a]] longitudinal rib (29) which has, only in certain discontinuous localized areas, at least one permanent deformation (30) which constitutes ~~a higher~~ an area on the longitudinal rib having a greater height than a height along ~~the rest~~ a remainder of the rib, thereby forming a projecting portion that serves as a positioning stop (17) ~~in order to for~~ maintaining optimal spacing between the seal (1) and the edge[[s]] (7) of the opening of the automobile; and

the at least one permanent deformation (30) is a flattened area on the rib (29) constituting the area of thinner and greater height than the remainder of the rib to thereby form the projecting portion that serves as the positioning stop (17).

18. (CANCELED)

19. (CURRENTLY AMENDED) The seal according to claim 17, wherein the longitudinal rib (29) has a plurality of permanent deformations (30) and each of the local plurality of permanent deformations (30) of the longitudinal rib (29) are disposed [[in]] at precise locations [[on]] along the seal (1)[[,]] selected and imposed for technical reasons and corresponding to areas on the edges of the opening where to meet manufacturing standards must be respected precisely with little allowance.

20. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal further comprises five ~~local~~ deformations (30) which each serve serving as one of the positioning stops (17).

21. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal ~~is designed to surrounds~~ [[the]] an entire perimeter of the window (3).

22. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal ~~is designed to~~ surrounds only a portion of ~~[[the]]~~ a perimeter of the window (3); ~~preferably three sides of the window.~~

23. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal is formed ~~[[of]]~~ from several profile elements (14, 15) integrated with one another into a unitary seal.

24. (CURRENTLY AMENDED) The seal according to claim 23, wherein the profile elements (14, 15) are integrated with one another by ~~soldering the~~ securing adjacent extremities (15), previously bisected at 45°, with one another.

25. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal is formed of a polymer material that ~~can be~~ is extruded and permanently locally deformed.

26. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal is formed of a plastic material ~~formulated with~~ having thermoplastic properties.

27. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal is made of ~~charged~~ polypropylene or polyvinyl chloride (PVC).

28. (CURRENTLY AMENDED) The seal according to claim 17, wherein the seal ~~is designed to be used on a~~ to secure one of a windshield (3), a rear side window ~~[[or]]~~ and a back window ~~[[on an]]~~ to the opening of the automobile.

29-32. (CANCELED)

33. (NEW) The seal according to claim 22, wherein the seal surrounds three sides of the window.

34. (NEW) A method of manufacturing a seal for a fixed window (3) for covering an opening (4) of an automobile, the method comprising the steps of:

forming the seal as a profile (13) comprising a longitudinal groove (23) with a sidewise U-shaped transverse section for attachment to an edge (9) of the window (3) and a masking lip (25) for covering a space (8) between the edge (9) of the window (3) and an adjacent edge (7) of the opening of the automobile;

providing a longitudinal rib (29) on an interior surface of the seal;

deforming the longitudinal rib (29), only in certain discontinuous localized areas, by flattening an area of the longitudinal rib (29) to form at least one permanent deformation (30) which constitutes a thinner and elongated area on the rib than along a remainder of the longitudinal rib (29) and thereby form a projecting portion that serves as a positioning stop (17) for maintaining optimal spacing between the seal (1) and the edge (7) of the opening.

35. (NEW) The method of manufacturing the seal according to claim 34, comprising the step of flattening the longitudinal rib (29) by one of a crushing and pinching operation during which the longitudinal rib (29) is locally flattened to reduce a thickness and increase the height, in predetermined areas, in order to form the projecting portion (30) which serves as the positioning stop (17).

36. (NEW) The method of manufacturing the seal according to claim 35, comprising the step of using a pneumatic press which crushes desired portions of the longitudinal rib (29), using jaws of a gripping tool, to flatten the longitudinal rib (29).

37. (NEW) The method of manufacturing the seal according to claim 34, comprising the step of using a cold process to deform the longitudinal rib (29).